SEPTORIA GLYCYRRHIZÆ, E. & K.—On living leaves of *Glycyrrhiza lepidota*, Rooks Co., Kan. Leg. E. Bartholomew, No. 26. On dirty brown, subindefinite, rather irregular-shaped spots, 2—6 mm. in diameter; perithecia epiphyllous, minute, abundant, inconspicuous; sporules cylindrical-clavate, 40–60 x 3 μ, continuous.

SEPTORIA LUPULINA, E.& K.—On leaves of *Humulus Lupulus*, Cloud Co., Ks., Oct., 1887. Leg. M. A. Carleton. Spots pale yellowish-white, subangular and limited by the veinlets, 2—4 mm. across, subconfluent and occupying the greater part of the leaf; perithecia scattered, innate but visible through the cuticle on the upper side of the leaf, appearing of a dark lead color, sublenticular (150 μ), of coarse cellular structure; sporules 35—45 x 2—2½ μ, curved, a little thicker at one end, obtuse. We have no specimens of *S. Humuli*, West., but that is said to have the perithecia "scattered in the center of the spots" and smaller, having also smaller sporules. On the under side of the leaves in the Kansas specimens are minute, superficial, black perithecia filled with oblong-elliptical sporules, 2—2½ x ½ μ.

PHYLLOSTICTA CELTIDIS, E. & K.—On living leaves of *Celtis occidentalis*, Rooks Co., Kansas. Leg. E. Bartholomew, No. 103. Spots amphigenous, dirty brown, suborbicular or more or less irregular, 2 mm.—1 cm. in diameter, becoming paler (subcinereous) above; perithecia minute, black, hypophyllous, filled with minute, oblong sporules, 3—4 x ½—¾ μ, hyaline.

NOTES ON FUNGI FROM WESTERN KANSAS, U. S. A.

BY W. T. SWINGLE, MANHATTAN, KANSAS.

The species mentioned in the following list were collected in the western part of Kansas, U. S. A., during the fall of 1887. The specimens were sent to Prof. W. A. Kellerman to be identified. The species were named by him and myself, assisted by Mr. J. B. Ellis. In the notes, I have included: 1st, species new to the state; 2d, species on host plants new to the state; 3d, species interesting on account of variations, etc.

The following species were collected in Rooks Co., Kan., by Mr. E. Bartholomew, during September and October, 1887.

UREDINEÆ.

ÆCIDIUM TUBERCULATUM, E. & K.—On *Callirrhoe involucrata*, Gr.

MELAMPSORA CROTONIS, Burrill.—On *Croton monanthogynus*, Mx., II and III; on *Croton Texensis*, Mull., II and III.

PHRAGMIDIUM MUCRONATUM (Pers.) Lk.—On *Rosa Arkansana*, Porter, II and III.

PUCCINIA FLOSCULOSORUM (Alb. & Schw.) Rœhl.—On *Vernonia ovalifolia*, T. & G., III.

PUCCINIA XANTHII, Schw.—On *Ambrosia psilostachya*, DC., III.

UROMYCES APPENDICULATA (Pers.)—On *Phaseolus*, sp. cult., III.

UROMYCES SCIRPI, Burrill.—On *Scirpus atrovirens*, Muhl., III.

UROMYCES GRAMINICOLA, Burrill.—On *Panicum virgatum*, L., III.

UROMYCES ŒNOTHERÆ, Burrill.—On *Œnothera Fremontii*, Watson, III. (Identified by Ellis.)

SPHÆROPSIDEÆ.

PHOMA VIRGINIANA, Ell. & Halsted.—On *Prunus Virginiana*, L.

VERMICULARIA SPARSIPILA, E. & K.—On *Callirrhoe involucrata*, Gr. *Æcidium tuberculatum*, E. & K., occurs on the same leaves.

PHYLLOSTICTA CELTIDIS, E. & K.—On *Celtis occidentalis*, L.

PHYLLOSTICTA VITICOLA, Thum.—On *Vitis riparia*, Mx. The specimens agree with the description in every respect.

SEPTOBIA GLYCYRRHIZÆ, E. & K.—On *Glycyrrhiza lepidota*. Nutt.

SEPTORIA GROSSULARIÆ, West.—On *Ribes aureum*, Ph.

SEPTORIA LACTUCICOLA, E. & M.—On *Lactuca Floridana*, DC. Sterile.

PHLEOSPORA CELTIDIS, E. & M.—On *Celtis occidentalis*, L.

PIGGOTIA FRAXINI, B. & C.—On *Fraxinus viridis*, Mx.

GLŒOSPORIUM ARGEMONIS, E. & E.—On *Argemone platyceras*, Link & Otto (JOURN. MYCOL., Vol. III, p. 129.

GLŒOSPORIUM TOXICODENDRI, E. & M.—On *Rhus Toxicodendron*, L. Spores 40—60 x 2½—3 μ, nucleate, not "12—15 x 5—6 μ". Specimens collected at Manhattan, Ks., July, 1887, by Kellerman & Swingle have spores 27—40 x 2—2½ μ.

DEMATIEÆ.

CERCOSPORA ALTHEINA, Sacc.—On *Callirrhoe involucrata*, Gr. Hyphæ 60—75 x 3—5 μ, somewhat submerged at base, having shoulder-like projections, seemingly open at end; conidia 75—120 x 2—3 μ, slightly clavate, hyaline, multiseptate.

CERCOSPORA CLAVATA (Gerard) Pk.—On *Asclepias speciosa*, Torr. Spots none; hyphæ amphigenous, effused, forming large, irregular dark patches.

CERCOSPORA CUCURBITÆ, E. & E.—On *Cucurbita perennis*, Gr. (JOURN. MYCOL., Vol. IV, p. 3).

CERCOSPORA GLANDULOSA, E. & K.—On *Ailanthus glandulosus*, Desf. Agrees with description in JOURN. MYCOL., Vol. I. p. 3, except that the conidia are 24—36 x 2—4 μ not "70—100 x 3—3½ μ".

CERCOSPORA HELIANTHI, E. & E.—On *Helianthus doronicoides*, Lam. Typical form (JOURN. MYCOL., Vol. III, p. 20). Mr. Bartholomew also sent the amphigenous form mentioned in JOURN. MYCOL., Vol. III, p. 6, on *Helianthus Maximiliana*, Schrad. The specimens he sent have the following characters: Hyphæ amphigenous, clustered, light coffee-color, 60—120 x 4—6 μ; septate, nucleate, irregularly bent, especially

at the tip; conidia 60—105 x 3—6 μ, clavate, 2—3-septate, very light coffee-color, slightly nucleate. The tufts of hyphæ are usually more abundant on the lower side of the leaf.

CERCOSPORA OXYBAPHI, Ell. & Halsted.—On *Oxybaphus nyctagineus*, Sweet. Very good specimens.

CERCOSPORA ROSÆCOLA, Pass.—On *Rosa Arkansana*, Porter.

CERCOSPORA PACHYPUS, E. & K.—On *Helianthus petiolaris*, Nutt., Form mentioned in JOURN. MYCOL., Vol. IV, p. 7. The specimens sent have the following characters: Spots at first minute, white, then increasing in size and finally becoming dirty brown; hyphæ amphigenous, olivaceous, clustered, 36—45 x 6—8 μ; conidia slightly colored, at first globular, finally 40—90 x 5—7 μ, 1—3-septate. The leaves are often overrun with the spots, giving them a peculiar pale appearance.

CERCOSPORA SILPHII, E. & E.—On living radical leaves of *Silphium integrifolium*, Mx. The conidia were larger than the description in the JOURN. MYCOL., Vol. IV, p. 3, states. They were 75—100 x 3—6 μ, instead of "70—80 x 3 μ".

CERCOSPORA ASCLEPIODORÆ, E. & K.—(JOURN. MYCOL., Vol. IV, p. 6.) On *Asclepias Jamesii*, Torr.

CHYTRIDIACEÆ.

SYNCHYTRIUM FULGENS, Schrœter.—On radical leaves of *Œnothera biennis*, L.

The following species were collected by Mr. M. A. Carleton in October, 1887:

UREDINEÆ.

PUCCINIA ANGUSTATA, Pk.—On *Scirpus*, Mitchell county, Kansas. Teleutospores.

PUCCINIA PHRAGMITES (Schum.) Kornick.—On *Spartina cynosuroides*, Willd., Mitchell Co., Kan. Teleutospores.

MUCEDINEÆ.

PERONOSPORA EFFUSA (Grev.)—On *Chenopodium album*, L., Cloud Co., Kan.

DEMATIEÆ.

CERCOSPORA ASCLEPIADIS, Ell.—On *Asclepias* (*arenaria*) *Cercospora clavata* (Gerard) also occurs on the under sides of the same leaves. Cloud Co., Kan.

NEW LITERATURE.

BY W. A. KELLERMAN.

"UNCINULA POLYCHÆTA, B. & C." By S. M. Tracy & B. T. Galloway, Botanical Gazette, February, 1888.